

CATALOGUE OF THE CICADIDÆ IN THE SOUTH AUSTRALIAN MUSEUM, WITH DESCRIPTIONS OF SEVERAL NEW SPECIES.

By HOWARD ASHTON.

(Communicated by A. M. Lea.)

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PLATE XVII.

Through the courtesy of the Director of the Museum (Mr. Edgar R. Waite) and the Entomologist (Mr. Arthur M. Lea) I have had the opportunity of working upon the material collected in the Homopterous family *Cicadidæ*. The collection is certainly an interesting one, and most of the specimens are well preserved. Included in it are some of the types of Goding and Froggatt, several of which I find are synonymous with older species. One of these, the type of *Melampsalta flava*, God. and Frogg., which is stated by the authors to be a mutilated specimen, is, in my opinion, so much mutilated that it should never have been made a type of a species. It may be a perfectly good species. On the other hand, it may be a pale, immature, and mutilated specimen of half a dozen other species. There are some fine series of species in the collection, and these are always valuable. As large series become available it is certain that specimens now regarded as of different species will be recognized as examples from each end of such ranges. In a country of such extent as Australia one must look for considerable geographical variation in species both as regards colour and size, and even, in dominant species, shape. *Melampsalta landsboroughi*, Dist., for instance, *M. torrida*, Erich., *Pauropsalta melanopygia*, Germ., and *M. abdominalis*, Dist., are species of great range and great variability. In the larger species *Tamasa tristigma*, Germ., and *Macrotristria intersecta*, Walk., are examples of extreme variability. This has misled workers in the past, and will mislead them in the future. I myself do not claim immunity from error. But I have examined a very large number of specimens in the Museum collections of Australia, and have also large series of species in my own, and my conclusion is that one should be extremely careful about making new species on colour or even on slight variation in form unless many specimens are available. With the

collection of immature imaginal specimens, which have not yet reached their full pigmentation, the Museums are full of traps for the unwary.

PLATYPLEURA, Am. and Serv.

(1) *P. tepperi*, God. and Frogg., Proc. Linn. Soc., N.S.W., 1904, p. 568, pl. xviii., fig. 5a. *Hab.*—Northern Territory.

THOPHA, Am. and Serv.

(2) *T. saccata*, Fabr., Syst. Rhyn., p. 34, 9, 1803. *Hab.*—New South Wales.

(3) *T. sessiliba*; Dist., Ann. Mag. Nat. Hist. (6), ix., p. 314, 1892. *Hab.*—Central Australia, Northern Territory.

(4) *T. colorata*, Dist., Ann. Mag. Nat. Hist. (7), xx., p. 411, 1907. *Hab.*—Central Australia: MacDonnell Ranges.

ARUNTA, Dist.

(5) *A. perulata*, Guer., Voy. "Coq.," Zool., ii., 2, p. 180, figs. 5 and 5a, pl. x., 1830. *Hab.*—New South Wales.

(6) *A. interclusa*, Walk., List. Hom. Suppl., p. 5, 1858; List. Hom., iv., pl. i., fig. 6, 1852. *Hab.*—Queensland: Kuranda.

CYCLOCHIDA, Am. and Serv.

(7) *C. australasiae*, Donovan., Ins. New Holl., Hem., pl. ii., fig. 1, 1805. *Hab.*—Victoria, New South Wales, Tasmania (?). Var. *spretta*, God. and Frogg., Proc. Linn. Soc., N.S.W., 1904, p. 370. *Hab.*—Victoria.

(8) *C. virens*, Dist., "Entomologist," p. 148, 1906. *Hab.*—Queensland: Kuranda.

PSALTODA, Stol.

(9) *P. mærens*, Germ., Silb. Rev. Ent., ii., p. 67, 1834. *Hab.*—South Australia, New South Wales, Victoria. There is one pale specimen determined as *P. aurora*, Dist. It is certainly not *aurora*, and is probably an unpigmented example of *mærens*.

(10) *P. argentata*, Germ., Silb. Rev. Ent., ii., p. 66, 1834. *Hab.*—New South Wales.

(11) *P. harrisi*, Leach, Zool. Miscell., i., p. 89, pl. xxxix., fig. 2, 1814. *Hab.*—New South Wales. One specimen is not of the usual black colour, being strongly variegated with yellow.

(12) *P. fumipennis*, Ashton, Proc. Roy. Soc., Vic., 1912, p. 222, pl. xlix., figs. 2a and b. *Hab.*—Queensland: Kuranda.

## HENICOPSALTRIA, Stol.

- (13) *H. eydouxi*, Guer., Voy. "Coq.," Zool., ii., 2, p. 181, 1830. *Hab.*—New South Wales.
- (14) *H. kelsalli*, Dist., Ann. Soc., Ent., Belg., p. 416, 1910. *Hab.*—Queensland: Coen River.
- (15) *H. nubivena*, Walk., List. Hom., Suppl., p. 17, 1858. *Hab.*—South Australia.

## MACROTRISTRIA, Stol.

(16) *M. angularis*, Germ., Silb. Rev. Ent., ii., p. 68, 1834. *Hab.*—New South Wales.

(17) *M. hieroglyphica*, God. and Frogg., Proc. Linn. Soc., N.S.W., 1904, p. 581. *Hab.*—Western Australia: Beverley.

(18) *M. sylvara*, Dist., Trans. Ent. Soc., Lond., 1901, p. 591, pl. xvi., figs. 1a and b. *Hab.*—Northern Queensland.

(19) *M. hillieri*, Dist., Ann. Mag. Nat. Hist., 1907, p. 413. *Hab.*—Western Australia, South Australia.

(20) *M. intersecta*, Walk., List. Hom., i., p. 97, 1850. *Hab.*—Northern Territory, Queensland. This is an extremely variable species. I have seen it from numerous localities, and in hardly any case is it without some local variation. It does not only vary in colour but also in shape, some specimens being pale, some dark, some unmarked on pronotum and mesonotum; some narrow-bodied, some as robust as Distant's *M. extrema*. After examination of the type specimen of Goding and Froggatt's *M. sylvanella* in the Macleay Museum, Sydney, I have no hesitation in declaring that this is merely a pale and narrow-bodied variety of Walker's species. I have seen every grade between it and the typical species *intersecta*, and it may possibly be found later that *M. extrema*, Dist., comes into the very wide drag-net of this extremely variable species as a larger and differently coloured race.

(21) *M. extrema*, Dist., Ann. Mag. Nat. Hist. (6), x., p. 56, 1892. *Hab.*—North-western Australia.

(22) *M. MACULICOLLIS*, n. sp. (pl. xvii., fig. 1). Closely allied to *M. angularis*, but very much smaller. Female—*Head* black, with a triangular spot on each side of vertex near front, and a stripe on apex of front yellow. *Pronotum* black with two curved, inwardly angulate fasciæ, one on each side of central line, yellow, and a centrally interrupted fascia of yellow along the dorsal surface of the posterior margin, with two other spots on the lateral dilatations. *Mesonotum* black, with two very small central fasciæ, two large discal fasciæ, and two lateral fasciæ yellow, cruciform

elevation brownish-yellow. *Abdomen* black. Head beneath black, yellow about clypeus, front black. Sternum variegated with black and yellow. Abdomen beneath yellow with lateral carinations and broad central fascia black. Tegmina with veins and basal cell fuscous, inner edge of costa and radius yellow, apical veins a little infuscated, as in *M. angularis*, but not so broadly. Wings with venation yellow. Rostrum reaches hind coxæ. Long., 42 mm.; exp. teg., 112 mm. *Hab.*—Queensland: Dalby (Mrs. F. H. Hobler). May be distinguished from *M. angularis*, Germ., by the black and yellow posterior pronotal margin, the black face, the more sessile eyes, and more prominent front.

(23) *M. occidentalis*, Dist., Ann. Mag. Nat. Hist., x., p. 438, 1912. *Hab.*—Western Australia: Cue.

(24) *M. vulpina*, n. sp. (pl. xvii., fig. 2). Allied to *M. hillieri* and *M. occidentalis*, but very much smaller. The body above is generally piceous, with the lateral discal areas of pronotum inclining to castaneous. Beneath it is pale fuscous-yellow, densely clothed with white tomentum. The lateral margins of the mesonotum are covered with silvery hair, as in *M. occidentalis*, and the abdomen (dorsally) is also well sprinkled with a similar pile, especially on the lateral areas. The segmental margins are also very narrowly margined with fuscous-yellow. The cruciform elevation is pale-fuscous, with a central brown spot. Tegmina are unspotted, without the infuscations noted in either *M. hillieri* or *M. occidentalis*. Distant's description of *M. hillieri* does not mention any infuscations of the tegmina, but many of the specimens in the Museum have the anastomoses distinctly marked. Long., 25 mm.; exp. teg., 74 mm. *Hab.*—Western Australia: Cue (H. W. Brown).

(25) *M. thophoides*, Ashton, Proc. Roy. Soc., Vic., part i., 1914, p. 13. *Hab.*—Western Australia: Cue.

(26) *M. nigrosignata*, Dist., Trans. Ent. Soc., Lond., 1904, p. 673, pl. xxix., figs. 7a and b. *Hab.*—Western Australia: Murchison district. This specimen is larger than Distant's figure, and lacks the chestnut colour, being much darker, but this latter is probably accounted for by the fact that it has been in spirits and has become greasy.

#### DICEROPYGA, Stol.

(27) *D. obtecta*, Fabr., Syst. Rhyn., p. 35, 1803. *Hab.*—Queensland: Coen River. In the National Museum, Melbourne, there is a large series of this species, which was collected by J. A. Kershaw on the Claudie River, Northern Queensland. Previously it had not been recorded from Australia, being a Papuan species.

## TETTIGIA, Am.

(28) *T. burkei*, Dist., Proc. Zool. Soc., 1882, p. 126, pl. vii., figs. 3a and b. *Hab.*—Northern Queensland.

(29) *T. hilli*, Ashton. *Hab.*—Northern Territory (see appendix).

## TAMASA, Dist.

(30) *T. tristigma*, Germ., Silb. Rev. Ent., ii., p. 69, 1834. *Hab.*—Queensland.

## GÆANA, Am. and Serv.

(31) *G. maculata*, Drury, Ins., ii., p. 68, pl. xxxvii., fig. i., 1773. *Hab.*—Northern Territory (?). There are three specimens, two labelled India, one Northern Territory. Personally I very much doubt whether the species, common in India, commoner in China, has an Australian *habitat* at all.

## VENUSTRIA, God. and Frogg.

(32) *V. superba*, God. and Frogg., Proc. Linn. Soc., N.S.W., 1904, p. 597, pl. xix., fig. 7a. *Hab.*—Queensland.

## ABRICTA, Stal.

(33) *A. curvicosta*, Germ., Silb. Ent. Rev., ii., p. 66, 1834. *Hab.*—New South Wales.

(34) *A. ruber*, God. and Frogg., Proc. Linn. Soc., N.S.W., 1904, p. 600. *Hab.*—New South Wales (?). The authors record this species only from the Northern Territory.

(35) *A. aurata*, Walk., List. Hom., i., p. 215, 1850. *Hab.*—New South Wales.

(36) *A. willsi*, Dist., Proc. Zool. Soc., Lond., p. 124, pl. vii., figs. 4a and b. 1882. *Hab.*—Northern Queensland, North-western Australia.

(37) *A. RUFONIGRA*, n. sp. (pl. xvii., fig. 6). Allied to *A. stalker*i and *A. willsi*, Dist., in tegminal markings. Body above a deep reddish-black, somewhat greyishly pilose, mesonotum with two subcentral anterior fasciæ of grey hair, lateral margins of same also marked with a line of similar pile. Chest beneath very much covered with hair. Long., 20 mm.; exp. teg., 62 mm. *Hab.*—Western Australia: Cue.

(38) *A. castanea*, Dist., Ann. Mag. Nat. Hist., xvi., p. 27, 1905. *Hab.*—Northern Territory, Queensland. There is one typical specimen of the rather pale-chestnut colour described by Distant. This comes from the Northern Territory. In addition there is a variation from Queensland with the castaneous colour of the head and pronotum very much darker, and with the first two tegminal anastomoses distinctly infuscated. A third variety, collected by the Calvert

Expedition of 1896 is a little smaller and of a more uniform reddish colour.

PARNKALLA, Dist.

(39) *P. gregoryi*, Dist., Proc. Zool. Soc., Lond., 1882, p. 129, pl. vii., figs. 7*a* and *b*. *Hab.*—Queensland.

(40) *P. muelleri*, Dist., Proc. Zool. Soc., 1882, p. 128, pl. vii., figs. 6*a* and *b*. *Hab.*—Queensland.

BURBUNGA, Dist.

(41) *B. gilmorei*, Dist., Proc. Zool. Soc., 1882, p. 127, pl. vii., figs. 8*a* and *b*.

(42) *B. inornata*, Dist., Ann. Mag. Nat. Hist., xvi., p. 29, 1905. *Hab.*—Central Australia. Agrees entirely with Distant's description except that the tegminal anastomoses are lightly infuscated.

QUINTILIA, Stal.

(43) *Q. infans*, Walk., List. Hom., i., p. 201, 1850. *Hab.*—South Australia.

JASSOPSALTRIA, nov.

Short, head very broad, front hidden from above, resembles rather in shape of head and thorax one of the *Jassidæ* (gen. *Eurymela*). Eight apical areas in tegmen, six in wing. Tympana fully exposed, openings narrow. Abdomen obconical, a little convexly inflated beneath, equal in length above to head and thorax. Thorax, head, and abdomen equal in width.

(44) *J. RUFIFACIES*, n. sp. (pl. xvii., fig. 4). Male. Green, tinged with yellow on pronotum and lateral areas of mesonotum, legs yellowish, face chestnut-red, eyes brown, not prominent. Tegmina and wings unspotted, vitreous. Long., 11.15 mm.; exp. teg., 32 mm. *Hab.*—Western Australia: Cue. A very distinct little species, easily recognized by the green colouration and red face.

PARAGUDANGA, Dist.

(45) *P. browni*, Dist. *Hab.*—Western Australia: Cue (H. W. Brown). I have not seen Distant's description, but there is one specimen thus labelled in the Macleay Museum, Sydney.

BÆTURIA, Dist.

(46) *B. RUFÆ*, n. sp. Male. Body above red, posterior segmental margins very narrowly marked with black. Head and thorax beneath ochraceous. Abdomen red, with segmental margins narrowly black. Opercula somewhat acute, directed

inwardly from apices, well separate. Abdomen very slightly inflated and laterally depressed. Long., 14.5 mm.; exp. teg., 46 mm. *Hab.*—Queensland: Coen River.

#### MARDALANA, Dist.

(47) *M. FUMEA*, n. sp. Female. Body above brown. *Head* yellowish, margins of front, and two divergent fasciæ from vertex, passing outside region of ocelli to vertical margins, black. *Pronotum* centrally brown, becoming piceous on lateral areas. *Mesonotum* purplish-brown, with four obsolescent obconical fasciæ, the two central shortest, black. *Abdomen* greenish-fuscous, lightest on dorsal ridge, with black interrupted lateral longitudinal fasciæ on each side. Body beneath yellowish-brown, face with central black stripe, abdomen with brown central longitudinal stripe, legs marked with black. Tegmina and wings hyaline, with a very distinct even smoky tinge. Long., 21 mm.; exp. teg., 65 mm. *Hab.*—Queensland: Coen River. (Collected by W. D. Dodd.)

(48) *M. congrua*, Walk., Jour. Ent., i., p. 303, 1862.

#### THAUMASTOPSALTRIA, Kirk.

(49) *T. glauca*, Ashton, Proc. Roy. Soc., Vic., 1912, p. 225, pl. li, figs. 8a and b.

#### CYSTOPSALTRIA, God. and Frogg.

(50) *C. immaculata*, God. and Frogg., Proc. Linn. Soc., N.S.W., 1904, p. 661, pl. xviii., fig. 1a. *Hab.*—Queensland.

#### KOBONGA, Dist.

(51) *K. umbrimargo*, Walk., List. Hom., Suppl., p. 32, 1858. *Hab.*—South Australia, Western Australia.

(52) *K. CASTANEA*, n. sp. *Head* black. *Pronotum* deep castaneous, a narrow central line (surrounded by black) and posterior margin bright-yellow. *Mesonotum* deep castaneous, two central anterior obconical spots, two larger sublateral spots, two spots at anterior angles of cruciform elevation, black. *Abdomen* black, segmental margins narrowly brownish ochraceous. Tegmina and wings with venation fuscous. Apical margins of both narrowly surrounded with deep fuscous, first apical area, first two anastomoses and apical longitudinal veins of tegmina deeply clouded with same. Body beneath with chest and legs piceous, varied with yellow. Abdomen yellow, with broad median black fascia. Face black, margins yellow, opercula short, square, transverse, pale-yellow. Long., male, 28 mm.; exp. teg., 83 mm. *Hab.*—Western Australia. May be distinguished from *K.*

*umbrimargo* by the chestnut colour of the thorax, and by the deeper infuscation of the tegmina and wings. The apical veins also are very much more curved backwards than in *umbrimargo*.

## MELAMPSALTA, Am.

(53) *M. torrida*, Erich., Arch., 1842, i., p. 286. *Hab.*—Victoria, Tasmania. In the long series from Tasmania there is considerable variation in colour, and even in shape, some being very robust and short, and quite black. However, an arrangement in series shows that it is all the one species. Goding and Froggatt's female type of *M. spinosa* is an immature specimen of *torrida*. The male type in the Macleay Museum is a totally different species.

(54) *M. convergens*, Walk., List Hom., i., p. 114, 1850. *Hab.*—South Australia, Western Australia.

(55) *M. labeculata*, Dist., Ann. Mag. Nat. Hist., 6, x., p. 66, 1892. *Hab.*—Queensland.

(56) *M. cingulata*, Fabr., Syst. Ent., p. 680, 9, 1775. *Hab.*—New Zealand.

(57) *M. TIGRIS*, n. sp. Male. *Head* with vertex black, front testaceous, margins black, a spot on vertex testaceous. *Pronotum* brownish-yellow, mottled about fissures with black, a black keyhole central longitudinal stripe enclosing a pale-yellow stripe. *Mesonotum* black, two subcentral inwardly angulate spots yellow, lateral margins castaneous. *Abdomen* black, with marginal broad stripes of orange-red, interrupted on dorsal ridge. Tegmina vitreous, venation fuscous. First two anastomoses deeply infuscated, a paler suffusion on apical margin. Wings vitreous, basal margins red. Head beneath black, face with central basal yellow fascia and margins yellow. Thorax yellow, striped with black; legs the same. Abdomen yellow, with a broad central black longitudinal fascia reaching to apical segment. Opercula rounded, not meeting centrally. Long., 16 mm.; exp. teg., 44 mm. *Hab.*—South Australia (Rev. A. P. Burgess).

(58) *M. APICATA*, n. sp. Resembles *M. labeculata*, Dist., in size and markings. Less robust in body, and not quite so large as the average specimen of *labeculata*. May be easily distinguished by the very characteristic markings on the tegmina, a broad smoky fascia extending along both the apical anastomoses and becoming diffused over the first two apical areas. Long., 20 mm.; exp. teg., 56 mm. *Hab.*—Western Australia: Cue.

The following species have the tegmina unmarked:—

(59) *M. abdominalis*, Dist., Ann. Mag. Nat. Hist., 6, ix., p. 323, 1892. *Hab.*—South Australia. A smaller and



lighter specimen is labelled by Goding and Froggatt as "*M. prolongata*, God. and Frogg." Their type of *Pauropsalta castanea* is also a pale specimen. The six cells in the wings make it obvious that it is out of its genus.

(60) *M. cruentata*, Fabr., Syst. Ent., p. 680, 10, 1775. *Hab.*—New Zealand.

(61) *M. landsboroughi*, Dist., Proc. Zool. Soc., 1882, p. 131, pl. vii., figs. 14*a* and *b*. *Hab.*—New South Wales, Queensland, Victoria, South Australia. The type of *M. tristrigata*, God. and Frogg., is in the Museum. It convinces me more than ever that this species cannot stand. It is obviously a form of *M. landsboroughi*.

(62) *M. viridicincta*, Ashton, Rec. Aust. Mus., Syd., ix., 1912, p. 78, pl. vii., fig. 5. *Hab.*—Western Australia.

(63) *M. rubrigrigata*, God. and Frogg., Proc. Linn. Soc., N.S.W., 1904, p. 638. *Hab.*—South Australia. The type is in the Museum.

(64) *M. arenaria*, Dist., Ann. Mag. Nat. Hist., 1907, xxiv., p. 422. *Hab.*—New South Wales: Sydney.

(65) *M. eyrei*, Dist., Proc. Zool. Soc., 1882, p. 130, pl. vii., figs. 12*a* and *b*. *Hab.*—Central Australia, Queensland.

(66) *M. binotata*, God. and Frogg. (type), Proc. Linn. Soc., N.S.W., 1904, p. 643. *Hab.*—South Australia.

(67) *M. labyrinthica*, Walk., List. Hom. Brit. Mus., i., p. 75, 1850. *Hab.*—South Australia.

(68) *M. incepta*, Walk., List. Hom., i., p. 187, 1850. *Hab.*—New South Wales.

(69) *M. murrayensis*, Dist., Ann. Mag. Nat. Hist., 1907, xx., p. 421. *Hab.*—New South Wales.

(70) *M. marginata*, Leach, Zool. Misc., i., p. 89., pl. xxxix., fig. 1, 1814. *Hab.*—New South Wales.

(71) *M. flava*(?), God. and Frogg., Proc. Linn. Soc., N.S.W., 1904. *Hab.*—Australia (?). It is difficult to understand why this very mutilated specimen was ever made a type. Distant gives the synonymy (Syn. Cat. Hom., 1906, p. 156) as *Muda beccarii*, Dist. It could not have been a determination from this type. Nobody could determine anything from it. At all events, whatever the species is, it is not *Muda*, for that genus has the radial and ulnar veins separate at the base. This species is either *Melampsalta* or *Pauropsalta*. So far the authors were admirably correct.

(72) *M. oldfieldi*, Dist., Proc. Zool. Soc., 1883, p. 191. *Hab.*—Queensland: Maryborough.

(73) *M. capistrata*, Ashton, Mem. Nat. Mus., Melbne., 4, 1912, p. 31, pl. iv., figs. c2 and 3. *Hab.*—Queensland.

(74) *M. crucifera*, Ashton, Proc. Roy. Soc., Vic., 1912, p. 226, pl. ii., fig. 9*a*. *Hab.*—Queensland.

(75) *M. froggatti*, Dist., Ann. Mag. Nat. Hist., 1907, xx., p. 419. *Hab.*—Queensland.

(76) *M. hermannsburgensis*, Dist., Ann. Mag. Nat. Hist., 1907, xx., p. 419. *Hab.*—Western Australia.

(77) *M. incipiens*, Walk., List. Hom., i., p. 189, 1850. *Hab.*—South Australia: Lucindale.

(78) *M. denisoni*, Dist., Ann. Soc. Ent., Belg., xxxvii., p. 78, 1893. *Hab.*—Tailer Bend (?) (J. W. Mellor, 1897). The *habitat* is given by Distant as Port Denison.

(79) *M. ADELAIDA*, n. sp. Female. *Head* black, base of front, spot at base of vertex, brownish-yellow. *Pronotum* yellowish-red, two central longitudinal linear fasciæ, ampliate and angulate anteriorly and posteriorly, discal curved fasciæ and sulci black. Posterior margin broadly edged anteriorly with black. *Mesonotum* black, two central discal spots barely connected with two more spots (one at each angle of cruciform elevation) yellow. Metanotal margins yellow. *Abdomen* black; segmental margins, except along dorsal ridge, broadly margined with reddish-yellow. Terminal segment yellow, two black stripes above, meeting at apex. Face below with central spot and margins yellow, thorax black, legs yellow, striped with black (more so in anterior pair). *Abdomen* yellow, a central black fascia. Ovipositor and surrounding furrow black. Tegmina with costa ferruginous, remaining venation black, basal membrane bright-orange, venation of wings paler. Long., 21 mm.; exp. teg., 62 mm. *Hab.*—South Australia: Adelaide (Trentham [?]). There is one smaller specimen labelled "Northern Territory." The largest of three, all females, is the type. Two males, labelled "*M. marginata*, Leach," in the Macleay Museum, Sydney.

(80) *M. SUBGLUSA*, n. sp. *Head* with vertex black, front and spot on hind border yellow. *Pronotum* and *mesonotum* reddish-brown, central longitudinal stripe to pronotum yellow, surrounded broadly with black, sulci black. Four obconical spots on mesonotum, central pair shortest. *Abdomen* with segmental rings anteriorly black, posteriorly red, beneath all red. Face beneath chestnut-red, with central black fascia, chest and legs yellowish, with browner markings, opercula pale greyish-yellow, rounded, not contiguous. Tegmina and wings vitreous, costa greenish-grey on basal half, fuscous towards apex, other venation from grey to fuscous at apex. Long., male, 16; exp. teg., 44 mm. *Hab.*—Western Australia: Cue. Allied to *M. incepta*, Walk., but considerably larger. Besides the type there are several specimens of a general greenish colour. These may be recently-emerged insects, or may belong to a paler-coloured race.

(81) *M. waterhousei*, Dist., Ann. Mag. Nat. Hist., 1905, xvi., p. 271.

(82) *M. melete*, Walk., List. Hom., i., p. 179, 1850. According to description and size this should be Walker's species. The type is unavailable, being in the British Museum, and I have not seen any authentic determination of this species.

(83) *M. æde*, Walk., List. Hom., i., p. 181, 1850.

#### PAUROPSALTA, God. and Frogg.

(84) *P. mneme*, Walk., List. Hom., i., p. 181, 1850. *Hab.*—New South Wales, South Australia. Goding and Froggatt's type of *P. prolongata* is a female specimen of this species. It is in the Museum.

(85) *P. extensa*, God. and Frogg. (type), Proc. Linn. Soc., N.S.W., 1904, p. 618.

(86) *P. melanopygia*, Germ., Silb. Rev. Ent., ii., p. 59, 1834. *Hab.*—Northern Territory, Northern Queensland. After examining dozens of this species in various collections and from various localities I am convinced that *P. nigristriga*, God. and Frogg., is a synonym. The species varies in depth of colour, and, on the Queensland side especially, carries the bars of black across the dorsal ridge of the abdomen, which gave the name to Goding and Froggatt's species.

(87) *P. encaustica*, Germ., Silb., Rev. Ent., ii., p. 62, 1834. *Hab.*—New South Wales, Victoria, South Australia.

(88) *P. basalis*, God. and Frogg., Proc. Linn. Soc., N.S.W., 1904, p. 625. *Hab.*—Northern Territory.

(89) *P. minima*, God. and Frogg., Proc. Linn. Soc., N.S.W., 1904, p. 628. *Hab.*—Central Australia, Queensland.

(90) *P. dubia*, God. and Frogg., Proc. Linn. Soc., N.S.W., 1904, p. 621. *Hab.*—South Australia, Victoria.

(91) *P. BELLATRIX*, n. sp. Allied to *P. encaustica*, Germ. Head and thorax greyish-brown. *Head* with most of vertex black. *Pronotum* with a central yellow stripe, sulci blackish. *Mesonotum* with four obconical black spots, central pair very short, outer pair reaching hind border. *Abdomen* black, covered with velvety hair, segmental margins narrowly red, anal segment in female yellow, two black stripes converging towards apex. Face beneath prominent, dark-brown, chest and legs brown, abdomen beneath orange-yellow with a central black longitudinal fascia. Tegmina and wings hyaline, wings with apex of anal area a little infuscated. In the type specimen this infuscation is absent. Long., female, 16 mm.; exp. teg., 45 mm. *Hab.*—Western Australia: Warren River (W. D. Dodd).

## BIRRIMA, Dist.

(92) *B. varians*, Germ., Silb. Rev. Ent., ii., p. 59, 1834. *Hab.*—Queensland. This is a female specimen, and therefore a little doubtful. The markings are the same, but the shape is slenderer.

## URABUNANA, Dist.

(93) *U. RUFILINEA*, n. sp. Body above black with the following red markings:—Pronotal margins and a central longitudinal stripe to pronotum, and abdominal segmental margins. Cruciform elevation and metanotal margins yellow. Head beneath black, with central basal spot to face and margins yellow. Chest brownish-yellow, opercula long, narrow, rose-pink. Abdomen beneath red, yellowish toward apex. Long., male, 10 mm.; exp. teg., 24 mm. *Hab.*—Galston, Dumbrell.

(94) *U. LONGIPENNIS*, n. sp. Similar in markings to *U. rufilinea*, but larger. The abdomen is long and a little inflated both in male and female. The markings on the thorax are yellow, a central pronotal fascia, and narrow yellow pronotal margins. The front is much more prominent than in *U. rufilinea*, the segmental borders in the abdomen are narrowly orange-yellow, and the opercula are short and transverse. The tegmina and wings are very much longer than usual with this genus, and with a pale milky tinge. The venation is very pale, almost white. Long., male 12 mm., female 16 mm.; exp. teg., male 36 mm., female 39 mm. *Hab.*—Central Australia: Tennant Creek. There is considerable variation in the number of apical cells in the wing—the type male has four, the female five; consequently the generic determination must be for a while uncertain.

(95) *U. festiva*, Dist., Ann. Mag. Nat. Hist., 1907, xx., p. 423. *Hab.*—Victoria.

(96) *U. verna*, Dist., Ann. Mag. Nat. Hist., x., 1912, p. 440. *Hab.*—Queensland: Dalby.

## LEMBEJA, Dist.

(97) *L. papuensis*, Dist., Ann. Mus. Civ., Genoa, 2a, xvii., p. 382, 1897. *Hab.*—Northern Queensland (?).

(98) *L. brunneosa*, Dist., Ann. Soc. Ent., Belg., 1910, p. 418. *Hab.*—Northern Queensland: Cape York.

## FROGGATTOIDES, Dist.

(99) *F. typica*, Dist., Ann. Soc. Ent., Belg., 1910, p. 418. *Hab.*—Western Australia.

## CYSTOSOMA, Westw.

(100) *C. saundersi*, Westw., Arc. Ent., i., p. 92, pl. xxiv., fig. 1, 1842. *Hab.*—New South Wales, Queensland.

(101) *C. schmelzi*, Dist., Proc. Zool. Soc., Lond., 1882, p. 132, pl. vii., figs. 11a and b. *Hab.*—Queensland.

## TETTIGARCTA, White.

(102) *T. tomentosa*, White, Eyre's Travels in Aust., append. i., p. 413, pl. iv., fig. 4, 1845. *Hab.*—Tasmania.

(103) *T. crinita*, Dist., Proc. Zool. Soc., Lond., 1883, p. 188, pl. xxv., figs. 5a, b, and c. *Hab.*—Victoria.

## ADDENDUM.

PAUROPSALTA LINEOLA, n. sp. Body yellow, shining. *Head* black, yellow spots at base of front, behind ocelli, and on each vertical margin. *Pronotum* yellow, a broad central black stripe and incisures black. *Mesonotum* yellow, two short central fasciæ, two longer sublateral ones, and two lateral marginal ones black. *Abdomen* yellow, narrow segmental margins and a broad central stripe, and two spots on anal segment black. Body beneath yellow, face prominent, black with yellow borders, broad lateral black fasciæ on each segment of abdomen, ovipositor and furrow black. *Tegmina* and wings vitreous, anal area of wings lacteous interiorly, venation fuscous. Long., female, 9 mm.; exp. teg., 26 mm. *Hab.*—Western Australia.

TETTIGIA HILLI, n. sp. (pl. xvii., fig. 3). *Head* and eyes chestnut, black about ocelli, yellow stripes behind eyes. *Pronotum* green, central keyhole-shaped fascia narrowly surrounded with black, incisures black anteriorly, anterior edge of posterior margin outlined in black. This margin is noticeably lighter than the rest of pronotum. *Mesonotum* chestnut, two short central anterior obconical spots, on each side a lateral fascia. Space before cruciform elevation black, lateral margins, cruciform elevation, and metanotal margins green. *Abdomen* black, segmental margins broadly and distinctly chestnut, apex of anal segment yellow. *Tegmina* and *wings* vitreous, basal third of costa and streak in basal cell green, basal membranes yellow, venation chestnut to piceous, first two anastomoses to apical cells of tegmina infuscated. Head beneath yellow, central stripe to face, enclosing yellow basal spot, black; legs brown, marked with black stripes on coxæ and femora; sternum greyish-yellow, covered with short grey hair. Abdomen brownish-chestnut along lateral edges; inside these chestnut areas greyish, with broad central longitudinal

black stripe; last segment and ovipositor black, yellow spot on each side at apex. Long., female, 19 mm.; exp. teg., 62 mm. *Hab.*—Port Darwin: Batchelor. Collected by Mr. G. F. Hill (Government Entomologist). A second specimen, also female, has the green in the pronotal and mesonotal discs replaced by bright-yellow. A third, which has evidently been in spirits, has become suffused in all the lighter areas with a dull-brown. The species is closely allied to *T. burkei*, Dist., from which it differs in the brighter colouration and in the less extensive markings of wings. The type is in my collection. There are specimens in the Macleay Museum, Sydney, marked by Goding and Froggatt *T. tristigma*.

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#### DESCRIPTION OF PLATE XVII.

- Figs. 1, 1a. *Macrotristria maculicollis*.  
 „ 2, 2a. „ *vulpina*.  
 „ 3, 3a. *Tettigia hilli*.  
 „ 4, 4a, 4b. *Jassopsaltria rufifacies*.  
 „ 5, 5a. *Kobonga castanea*.  
 „ 6, 6a, 6b. *Abrieta rufonigra*.
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Fig 1



1a

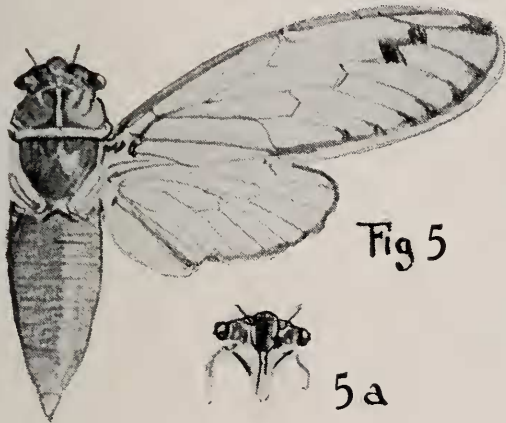


Fig 5



5a

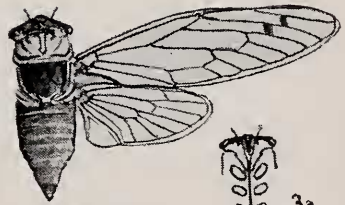
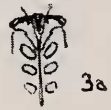


Fig 3.



3a

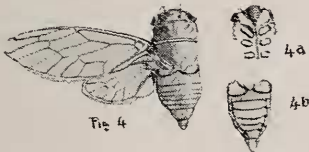


Fig 4



4a



4b

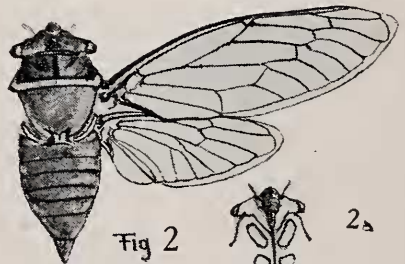


Fig 2



2a



Fig 6



6a



6b